

Amendments to the Claims

The following listing of claims replaces all prior versions and listings of claims in the present application:

1. (Currently Amended) A wind power generation device comprising:
 - a substantially cylindrical duct;
 - an impeller having a plurality of blades protruding outward, said impeller being rotatable around a duct axis; and
 - a nacelle that constitutes a streamlined pencil body together with said impeller and houses a generator that uses a torque of said impeller,

wherein said duct has a side wall with a wing-shaped cross section, so as to be able to produce a reduced pressure area at a rear of said duct and prevent generation of swirl at the rear of said duct,

wherein said pencil body is provided such that a forward end thereof is disposed inside of said duct and a rear end thereof protrudes outwardly from a rear end of said duct, so as to be close to a tip of the reduced pressure area produced at the rear of said duct,

wherein blades of said impeller are provided in a maximum wind speed area in said duct,

wherein a chord of said wing-shaped cross section of said side wall of said duct is inclined at a predetermined angle to the duct axis, and wherein a protruding length of the rear end of

said pencil body from the rear of said duct is adjusted according to a position of the tip of said reduced pressure area, which changes depending on said predetermined angle, {and}

wherein said predetermined angle is a positive angle such that a leading edge of said chord at the front end of said duct is separated a greater distance from said duct axis than a trailing edge of said chord at the rear end of said duct, and

wherein said predetermined angle is 2° to 12°, and the protruding length of said pencil body from the rear of said duct is 0.1 to 0.4 times a length of said duct.

2. (Canceled)

3. (Canceled)

4. (Previously Presented) The wind power generation device according to claim 1, wherein said blades of said impeller are provided within a range of 0.07 times the length of said duct in a forward direction, and 0.18 times the length of said duct in a rearward direction, with respect to a minimum inner diameter portion of said duct.

5. (Canceled)

6. (Currently Amended) The wind power generation device according to {claim 3} claim 1, wherein said blades of said impeller are provided within a range of 0.07 times the length of

said duct in a forward direction, and 0.18 times the length of said duct in a rearward direction with respect to a minimum inner diameter portion of said duct.

7. (Canceled)

8. (New) A wind power generation device comprising:
a substantially cylindrical duct;
an impeller having a plurality of blades protruding outward,
said impeller being rotatable around a duct axis; and
a nacelle that constitutes a streamlined pencil body
together with said impeller and houses a generator that uses a
torque of said impeller,

wherein said duct has a side wall with a wing-shaped cross section, so as to be able to produce a reduced pressure area at a rear of said duct and prevent generation of swirl at the rear of said duct,

wherein said pencil body is provided such that a forward end thereof is disposed inside of said duct and a rear end thereof protrudes outwardly from a rear end of said duct, so as to be close to a tip of the reduced pressure area produced at the rear of said duct,

wherein blades of said impeller are provided in a maximum wind speed area in said duct, {and}

wherein said blades of said impeller are provided within a range of 0.07 times the length of said duct in a forward direction, and 0.18 times the length of said duct in a rearward

direction, with respect to a minimum inner diameter portion of said duct.

wherein a chord of said wing-shaped cross section of said side wall of said duct is inclined at a predetermined angle to the duct axis, and wherein a protruding length of the rear end of said pencil body from the rear of said duct is adjusted according to a position of the tip of said reduced pressure area, which changes depending on said predetermined angle, and

wherein said predetermined angle is 2° to 12°, and the protruding length of said pencil body from the rear of said duct is 0.1 to 0.4 times a length of said duct.

9. (Canceled)

10. (Canceled)

11. (Currently Amended) The wind power generation device according to ~~claim 9~~ claim 8, wherein said predetermined angle is a positive angle such that a leading edge of said chord at the front end of said duct is separated a greater distance from said duct axis than a trailing edge of said chord at the rear end of said duct.